





Volume 59, Number 11

ACADIANA AMATEUR RADIO ASSOC., INC. - a 501(c)3 Corporation

November 2019

## Tour du Teche X Race Results Sandy LeBlanc KE5KJF

Larry and I would like to thank all of the volunteers who helped with the Tour du Teche Canoe Race which happened on October 4 - 6, 2019. The race was for 135 miles from Port Barre to Berwick.

In the Big Boat category (3 or more paddlers) a 6 man team from Texas completed the race in 19:53:03 hours averaging 6:79 mph. There was also a 4 man team that averaged 5:81 mph. Cory Werk from Breaux Bridge was a member of that team.

The all time record to beat was 7:46 mph set in 2016. Every year money is put in a Bourre Pot. If a boat sets a new record they get the Bourre Pot. If no one beats the fastest time the money is put into the pot for next year.

Other races include Tandem (two people) single paddle with a time of 5:27 mph. Solo single paddle with a time of 5:48 mph. Tandem unlimited with a time of 5:06 mph. Solo Double Blade with a time of 5:38 mph.

In the shorter races the results are as follows:

Crawfish (34 miles) – 5:36 mph Hot Sauce (24 miles) Solo – 5:33 mph Hot Sauce Solo Unlimited Paddle – 4:44 mph Hot Sauce Tandem Unlimited – 3:94 mph Black Bear (35 miles) Solo Unlimited – 3.47 mph Oil & Gas (27 miles) – Solo Unlimited – 5:51 mph Oil & Gas Tandem – 3:57 mph

Members who volunteered included Herman Campbell KN5GRK, Glenn Thibodeaux KF5FNP, Dave Redfearn N4ELM, Dave McCutcheon KG5JHR, Jackie Wallace KF5PCH, Ric Wallace KF5KEL, Paula Romero KF5CNS, Nick Pugh K5QXJ, JoAnn Pugh KE5RPL, Ali Pugh, Danny Daigle KD5JSM, Kathy Daigle KD5TJZ, Galen Wilson KF5BET, Kendra Wilson KF5FYS, Brandon Stelly KG5LQM, Tom Dischler W5OHJ, Dee Dischler, Larry LeBlanc KE5KJD, and Sandy LeBlanc KE5KJF.

\_Larry and I would like to thank the AARA and Ray Pellerin for the opportunity to serve the Tour du Teche these last 9 years. We have enjoyed it.

Thanks again, Sandy LeBlanc KE5KJF

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## DATES TO REMEMBER

#### GENERAL MEETING

November 7, 2019 7:00 PM Lafayette Science Museum 433 Jefferson Street Lafayette, LA

http://www/w5ddl.org/clubsite/

Local 2-Meter Nets Monday AARA Monday Night Net 7:00 PM 146.820 PL 103.5 Lafayette, LA

Tuesday

Region 4 SkyWarn Net 7:00 PM 145.370 - PL 103.5 Lafayette, LA

**Wednesday** Silent Key Memorial Net 6:30 PM **146.820 No PL New Iberia, LA** 

#### AARA OFFICERS 2018 - 2019

President – Chris Ancelet N5MCY cancelet@gmail.com

V. Pres. - Derek Meche WM5TS
Secr – David McCutcheon KG5JHR
Treasurer - Tom Dischler W5OHJ

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## October 2019



**VE Test Session** 

3 October 2019

Well, it was another good evening with another new Ham being born. That would be Addison J. Bute ~ KI5GTI of Lafayette becoming our newest Tech.

Congratulations and welcome to the hobby !!!!

The VEs assisting this evening were Greg ~ K5LFT, Galen ~ KF5BET, John ~ W4HVH, Archie ~ W5AG, Dave ~ N4ELM, Mike ~ KI5ARX & Rick ~ KF5KEL.

Thanks guys & congratulations again to Addison !!!!!!!

73, de Greg ~ K5LFT



## New Antenna Concept Uses Saltwater and Plastic Instead of Metal Conductor

A new antenna that uses saltwater and plastic instead of metal could make it easier to build VHF and UHF networks, an IEEE Spectrum article asserts.

Michelle Hamson says, "Being able to focus the energy of a radio signal toward a given receiver means you can increase the range and efficiency of transmissions," in her article, "New Antenna Uses Saltwater and Plastic to Steer Radio Beams." According to the article, beamsteering or beamforming on a large scale is one of the key underlying mechanisms behind the rollout of 5G networks. The configuration of the saltwater antenna allows 360° beam-steering and works for frequencies between 334 and 488 MHz.

In a recent publication in IEEE Antennas and Wireless Propagation Letters, Lei Xing and her colleagues at the College of Electronic and Information Engineering at Nanjing University of Aeronautics and Astronautics in China have proposed a new saltwater-based antenna that achieves 12 directional beam-steering states, and one omnidirectional state.

"The proposed design consists of a circular ground plane, with 13 transparent acrylic tubes that can be filled with (or emptied of) salt water on demand. One tube is located in the center to act as a driven monopole. Surrounding it are 12 parasitic monopoles," the article explains. "The 12 remaining monopoles, when filled with water, work together to act as reflectors and give the broadcasted signal direction."

"The attractive feature of using water monopoles is that both the water height and activating status can be dynamically tuned through microfluidic techniques, which has a higher degree of design flexibility than metal antennas," explains Xing.

One limitation of salt water-based antennas, she notes, is that that the permittivity of salt water -- i.e, how it interacts with electrical fields -- is sensitive to temperature variations.

From ARRL Newsletter October 24, 2019

## **Getting It Right!**

The item, "PACTOR Developer SCS Announces Monitoring Software," which appeared in the <u>October 17 edition of The ARRL Letter</u>, included some inaccurate language. The story should have said, "The issue of message transparency arose in recent months with respect to renewed attention to ARRL's so-called 'symbol rate' petition for rulemaking (RM-11708) and the accommodation of automatically controlled digital stations (ACDS) -- many of which employ Winlink. Some commenters on ARRL's petition have asserted incorrectly that PACTOR facilitates de facto message encryption, which would violate FCC Amateur Service rules." (Neither Winlink nor PACTOR are encrypted.)

## NASA Spacecraft Launches on Mission to Explore Frontier of Space

From ARRL Letter October 17, 2019

NASA's Ionospheric Connection Explorer (ICON) spacecraft is in orbit for a first-of-its-kind mission to study a region of space where changes can disrupt communications and satellite orbits, and even increase radiation risks to astronauts. ICON was launched on October 11 after a Stargazer L-1011 aircraft from Cape Canaveral Air Force Station in Florida carried it to about 39,000 feet. Then, a Pegasus rocket fired the roughly refrigerator-sized ICON into space.

The spacecraft's solar panels successfully deployed, indicating it has power with all systems operating, NASA reported. ICON will start sending back its first science data in November.

ICON will study changes in the ionosphere, where, in addition to affecting radio signal propagation, space weather can prematurely decay spacecraft orbits and expose astronauts to radiation-borne health risks. "Historically, this critical region of near-Earth space has been difficult to observe," NASA explained. "Spacecraft can't travel through the low parts of the ionosphere and balloons can't travel high enough." ICON's orbit around Earth places it at a 27° inclination at an altitude of about 360 miles, from which it can observe the ionosphere around the equator.

Nicola Fox, Director for Heliophysics at NASA Headquarters in Washington, said that ICON will be the first mission to simultaneously track what's happening in Earth's upper atmosphere and in space to see how the two interact, causing the kinds of changes that can disrupt radio communication. ICON will employ four instruments to explore the connections between the neutral atmosphere and the electrically charged ionosphere. Three of these rely on the phenomenon called airglow, which is created by a process similar to that which causes aurora -- gas is excited by radiation from the sun and emits light. By way of airglow, ICON can observe how particles throughout the upper atmosphere are moving. ICON's fourth instrument provides direct measurements of the ionosphere around it.

Amateur Radio on the International Space Station (ARISS) veteran Will Marchant, KW4WZ (ex-KC6ROL), is part of the ICON team.

## Homebrew Heroes Award for 2019 in Amateur Radio Announced

The Homebrew Heroes Award Program has announced its first annual recipient. He is Hans Summers, G0UPL, of East Sussex in the UK. The annual award recognizes individuals, groups, or organizations who help define the frontiers of Amateur Radio technology through the long-standing tradition of constructing their own equipment.

"Our Steering Committee sought the advice of an anonymous selection committee that surveyed the landscape of known homebrew designers in Amateur Radio," Steering Committee member Frank Howell, K4FMH, said in an October 13th news release. "There are indeed many very deserving ones! But only one can be chosen each year." Other Steering Committee members are Martin Butler, M1MRB, and Colin Butler, M6BOY -- all affiliated with the ICQ Podcast.

For his part, Summers said he was humbled and "just blown away by it all" to be the first recognized with the Homebrew Heroes Award. Summers said he's been sharing his homebrew work and that of his company QRP Labs through his website for years. "To have these efforts publicly recognized in this way is so personally gratifying," Summers said.

Martin Butler said that Summers "has continually demonstrated to all with at least one eye open that the traditional homebrew craft and science is alive and well."

# The Weather Channel Cites "Old School Tech" Amateur Radio as Storm Resource

From ARRL Letter October 3, 2019

Julio Ripoll, WD4R, Amateur Radio Assistant Coordinator of WX4NHC at the National Hurricane Center (NHC) explained Amateur Radio's role during severe weather situations to interviewers from The Weather Channel (TWC). In a September 16 segment headlined, "Using Old School Tech During a Storm," Ripoll -- seated at WX4NHC -- told Weather Channel interviewers Rick Knabb and Mike Bettes, that information NHC forecasters receive via Amateur Radio volunteers and spotters "sometimes fills in gaps they can't get from satellites or reconnaissance."

Knabb recounted an occasion when he was trying to pin down information about a storm system in Central America. "The only way I was able to accurately document what happened with that system in Central America was because of data through the ham radio operators that relayed it," he told Ripoll.

Ripoll cited the WX4NHC volunteer staff of approximately 30 radio amateurs who gather and essentially screen information gathered via Amateur Radio for weather data that may be of use to forecasters.

Over the weekend, Ripoll expressed appreciation to WX4NHC, Hurricane Watch Net, and VoIP Hurricane Net volunteers for the time they donate during hurricanes and the reports they send to WX4NHC.

"Sometimes, we sit for hours listening to static. Sometimes, we receive many reports that are unremarkable. Sometimes, we receive very few reports. But then there are those times that one or two reports make a difference," Ripoll said. He noted that NHC Hurricane Specialist Stacy Stewart cited Amateur Radio in a Hurricane Humberto advisory.

The advisory noted, "An Amateur Radio operator at Ports Island near the southern end of Bermuda reported a sustained wind of 75 MPH and a gust to 104 MPH during the past hour. An Amateur Radio operator in Somerset Village recently reported a sustained wind of 70 MPH and a gust to 89 MPH." -- Thanks to Julio Ripoll, WD4R

## Adding a Real Time Clock to Raspberry PI

From Julian OH8STN Julian OH8STN webblog

Hello Operators.

Todays topic is off grid time. Specifically, we are installing and configuring a Real Time Clock, for the Raspberry Pi.

The Raspberry Pi does not have an RTC module built in. this isn't really a big deal when we are constantly connected to the internet. However when we want to achieve some level of autonomy from the Grid, or don't have the possibility of a persistent internet connection, we need to add a Real-Time clock (RTC), and/or GPS.

I've decided on using both. Last year I published the GPS time for raspberry pi tutorial. In order to achieve a higher level of accurate time redundancy, we will install and configure the ds3231 rtc module from Amazon USA or Amazon UK as an add-on.

### **Local 2-Meter Nets**

#### **MONDAY**

AARA Monday Night Net 7:00 PM 146.820 PL 103.5 Lafayette, LA

#### WEDNESDAY

Silent Key Memorial Net 6:30 PM 146.820 No PL New Iberia, LA



# TUESDAY Region 4 Skywarn Net 7:00 PM 145.370 PL 103.5 Lafayette, LA

## AARA Monday Night 2 Meter Net

Net Controllers will rotate each week and held on the 146.820 W5DDL Repeater only.

The 146/820 and 443.00 Repeaters located on the Chase Towers downtown Lafayette are down indefinitely due to roof repairs. The AARA Monday Night Net and the Silent Key Memorial Net is being held on the 147.040 repeater in Duson, LA until repairs are completed. The 145.410 in Lydia is back up, PL of 123.0.

The December 2019 schedule can be downloaded and printed in Adobe Acrobat .PDF from the club website. Net Schedules

#### REGION 4 SKYWARN NET

Each Tuesday night at 7:00 PM (local), the Region 4 Skywarn Net will take place on the 145.370 Skywarn Repeater in Lafayette, LA. Net Control Operators will alternate each week.

In case the 145.370 repeater fails, the net will ne held on the 146.820 W5DDL repeater PL Tone 103.5.

The December schedule can be found at this link: Net Schedules

When using the Skywarn 145.370 repeater, be sure to use the receiver PL tone for your area as follows:

NW Quadrant 114.8 - NE Quadrant 127.3 - SW Quadrant 141.3 - SE Quadrant 94.8 - Central 103.5

See our website for additional information: http://www.w5ddl.org/repeaters.htm





<i>11-01</i>	KE5RPL	JoAnn
<i>11-03</i>	K5USH	Paul
11-11		Sandra
11-16	KG5JHR	David
11-20	KC5UGC	Steven
11-30	K5JMR	John
<i>12-09</i>	NA5Q	Roland
12-11	KG5QKH	Raymond

Some members failed to put their birthdays on their applications for renewal / membership causing names to be missing from the list.

Don't forget to renew your membership by January 31st.

## Stepping into a Pi

At this month's AARA meeting, we decided to try something new. After our regular meeting, the club members broke up into smaller groups to watch different demonstrations on the amateur radio hobby. Paul N5KNY had a fairly large group attend his *Setting Up a Raspberry Pi* demonstration. Chris N5MCY had recently purchased a Raspberry Pi 4 and knew NOTHING about setting it up to be able to use it. Paul went through all the steps about how to begin setting it up.







Paul explained that the single board computer first needed an operating system to do anything. Once you had that downloaded, the operating system needed to be installed on the SD card (usually included with most starter kits). Then you installed the SD card, connected the peripherals, added power, and waited for it to get started. After a few necessary changes like time zone and login information (always change the password from default), it was ready to go. But to do what?

The Raspberry Pi can be used just like a computer. After all, it is a computer. But not a powerful one. There are many sites on the web you can look at to learn more about the Pi and setting it up. The most useful are www.raspberrypi.org, leading to the main Raspberry Pi site, and my favorite <a href="http://www.g0hwc.com/raspberry-pi-ham-radio.html">http://www.g0hwc.com/raspberry-pi-ham-radio.html</a> for just the basics.

There is also another site just for setting the Pi up for Ham Radio at https://dllgkk.com/setup-raspberry-pi-for-ham-radio/. This website includes many programs used in ham radio. The following is a list of many available:

QTEL ~ Echolink client Chirp ~ for programming radios

 $VOACAP \sim Propagation \ Prediction \\ QSSTV \sim Slow \ Scan \ Television \\ JS8CALL \sim digital \ mode \\ FLDigi \sim digital \ mode \\ FLRig \sim radio \ control$ 

GRIDTRACKER ~ display contacts on map

Buying a Pi doesn't cost you hundreds of dollars. Just go to Amazon.com and search for a Raspberry Pi starter kit, and for about \$100 USD you can get almost all that you need. With a kit like this CanaKit Raspberry Pi 4 from Amazon, all you need is a small monitor (some people use their iPads) and a keyboard.

Personal advice follows. I started using the Raspberry Pi 3 when it first came out and learned a few things about using it portable with a radio. First, most of the plastic cases available ate not too sturdy. If you can, invest in an aluminum case with a fan. Heat is the enemy of every computer. Secondly, a wifi or Bluetooth keyboard makes life simpler. Third, invest in portable power. Lastly, checkout Julian's Youtube channel at OH8STN.

Don't forget that the Veterans Day Event will be held on Saturday November 9<sup>th</sup>, 2019 at the SW Louisiana Veterans Home in Jennings, LA at 1610 Evangeline Rd Jennings, LA. From I-10 East/West, take Exit 65 and turn South on LA 97. The Home is on the right hand side about ½ mile from the interstate.

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Website: <a href="http://www.w5ddl.org">http://www.w5ddl.org</a>



Share the Fun ~ Bring a Friend to be a HAM.

#### **UPCOMING EVENTS**

Veterans Day Special Event *November 9* SW Louisiana Veterans Home Jennings, LA

AARA Hamfest March 13-14, 2020 Rayne, LA

Mike Cavell November 7<sup>th</sup> Battery Technology Presentation @General Mtg

For any additional information, check the W5DDL.org website

# Fish Boulettes Also called Gar Fish Balls

3 Lbs Boneless Fish-firm fish 4 Cloves Chopped Garlic ½ bunch Green Onion Tops 1 Beaten Egg Tony's Seasoning Small amount of Flour 1-1/2 lbs Peeled Potatoes 1 lg Chopped Onion 1 stalk Celery 1 tsp Dried Parsley Cooking Oil

\_ Boil potatoes until soft and mash (or use instant). Make firm mashed potatoes. Boil fish a short time, until rawness is out and drain. Break fish into pieces or grind or smash. Sauté the onions, garlic, and celery, in a little oil, until translucent. Mix all ingredients together and form into balls or cakes (about 1-1/2" dia.), and coat with flour, breadcrumbs, or Panko.

Place about 1" of oil in a Dutch oven and bring up to 350°F. Place balls in hot oil and cook until brown: then turn over and cook the other side. Place on paper towels to drain.

\*\*\*Note: "Fish" to potato ratio should be 2 parts fish to 1 part firm mashed potato.

\*\*\*Note: This same recipe' can be used with shrimp, crab, crawfish, or any combination.

## FCC Information Service

Toll Free (WATS) for Amateur Radio license inquiries about new/vanity call signs: 1-888-225-5322 This will connect you the FCC National Call Center, handled by the FCC's Consumer Information Bureau. Amateurs having ULS problems or questions should contact the FCC's ULS Technical Support staff at: 202-414-1250 or:

ulscomm@fcc.gov.

FCC Website:

http://wireless.fcc.gov/uls/

New call sign information can also be obtained from the ARRL/ VEC at 860-594-3000.

http://www.arrl.org/arrlyec

The mailing address to the FCC

is: Federal Communications Commission,

445 12th Street SW Washington, DC 20554